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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,939

10/05/2006

Christopher Neil Wood

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PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.

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EXAMINER

O'HARA, BRIAN M

ART UNIT

PAPER NUMBER

4136

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,939	Applicant(s) WOOD, CHRISTOPHER NEIL	
	Examiner Brian M. O'Hara	Art Unit 4136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>08/04/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 32, 37, 38, 39, 41, 42, 43, 44, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westcott (US Patent 2,811,326 A) in view of Courtois et al. (US Patent 6,786,451 B2).** Westcott discloses a landing gear (See Fig. 1) for an aircraft, with a plurality of load bearing supports (10, 30) being arranged in parallel and one behind the other, but does not disclose a noise reduction fairing or the landing gear being used as a nose landing gear. Courtois et al. discloses a noise reduction fairing (120) which at least partially fairs the front load bearing support and a nose gear leg (Column 3, Line 59-61). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to provide a nose landing gear with a noise reduction fairing on the landing gear disclosed by Westcott in view of the teaching of Courtois et al. The motivation for doing so would be to create a protective covering over the steerable landing gear strut.

In regard to claim 37, Westcott discloses at least one of the load bearing supports including a shock absorbing element (10).

In regard to claim 38, Westcott discloses a main load strut with shock absorbing capacity (10) and another load strut (30) with different shock absorbing capacity.

In regard to claim 39, Westcott discloses two of the load bearing supports being configured to withstand significantly different loads (10, 30, Column 4 Line 7-15).

In regard to claim 41, Westcott discloses the load bearing supports being substantially perpendicular to the longitudinal axis of the aircraft (See Fig. 1)

In regard to claims 42 and 44, Westcott discloses that two or more of the landing gear provided can be “employed as the main landing gear of the craft” (Column 1 Line 54-57).

In regards to claim 46, Westcott and Courtois et al. does not specifically disclose a kit for converting a conventional aircraft into an aircraft having a noise reduction fairing. However, it would have been obvious to a person of ordinary skill in this art to provide a kit to convert a conventional landing gear, because a kit or any packaging and instructional means is an obvious way to distribute any product.

In regards to claims 47-48, it would have been inherent that a step in providing a noise reducing landing gear would include the step of actually manufacturing the landing gear and that it would be inherent that in order to reduce the noise caused by a landing gear would involve improving an existing landing gear.

3. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westcott and Courtois et al. in view of Cowey (US Patent 2346010 A).

Westcott and Courtois et al. disclose the aircraft landing gear as disclosed above, but do not disclose the fairing element extending around at least two of the load bearing

supports. Cowey discloses a fairing (25) which encloses the entirety of the load bearing supports. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to extend the fairing around the load bearing supports of Westcott in view of the teaching of Cowey. The motivation for doing so would have been to reduce the noise created by the air contacting the load bearing supports of the landing gear.

4. **Claims 35, 36, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westcott, Courtois et al., and Cowey in further view of Hrusch (US Patent 6308916 B1).** Westcott, Courtois et al., and Cowey disclose the aircraft landing gear as disclosed above, but do not disclose providing service pipes, cables, conduits, or the like between the load bearing supports or a bogie. Hrusch discloses hydraulic lines (101 and 102) which run down a support structure along with a bogie (12). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to provide pipes between two longitudinal load bearing supports which are encompassed by the fairing element and attached to a bogie, on the landing gear disclosed by Westcott and Courtois et al., and Cowey in view of the teaching of Hrusch. The motivation for doing so would have been to provide a platform with good braking capabilities.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thorpe (US Patent 6,048,477 A) discloses a fairing for protecting

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against debris, Meneghetti (US Patent 6,173,920 B1) discloses parallel struts on a truck, and Hawkins (US Patent 2,487,548 A) discloses parallel struts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on compressed 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James A. Shriver can be reached on (571)272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian M O'Hara/
Examiner, Art Unit 4136

/J. Allen Shriver/
Supervisory Patent Examiner, Art Unit 4136